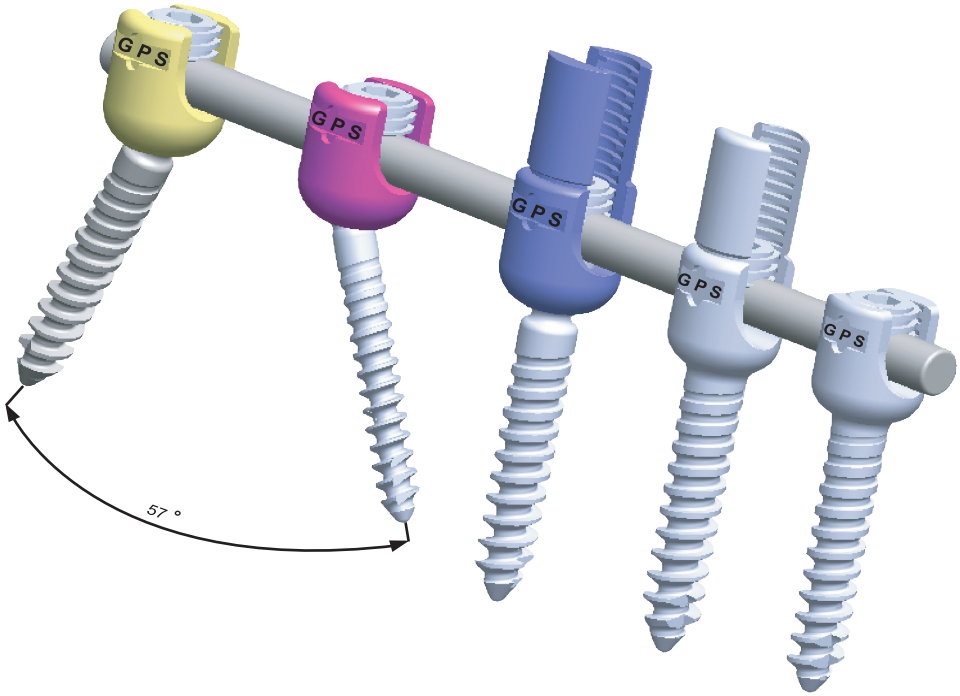
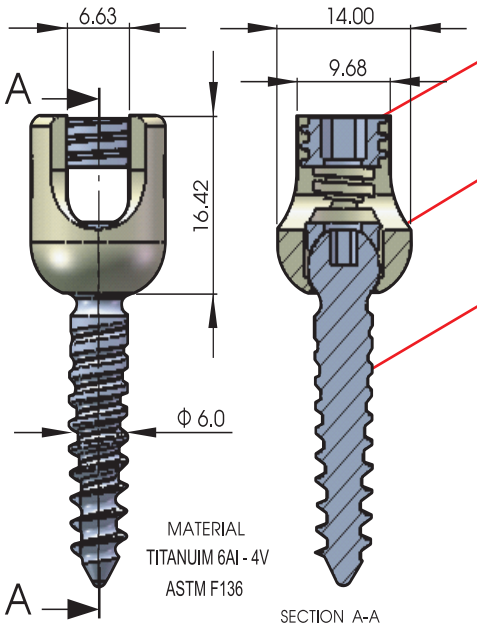
LOW PROFILE, TOP LOADING, MULTI-AXIAL SYSTEM TO ADDRESS PATHOLOGIES OF THE THORACIE AND LUMBAR SPINE



G SURGICAL PEDICLE SYSTEM

G SURGICAL PEDICLE SCREW





Generations Ahead

Position Optimization

Secure Construct Fixation

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LOW PROFILE, TOP LOADING, MULTI-AXIAL SYSTEM TO ADDRESS PATHOLOGIES OF THE THORACOLUMBAR SPINE



G SURGICAL P EDICLE S YSTEM

The G Surgical Pedicle System is a low profile top loading design featuring 57° of angulation for optimal location placement. GPS utilizes a 6 mm rod design for maximum construct security.

All products are engineered from implant grade titanium, USA manufactured to ISO 13485 requirements, tested at a leading USA University to ASTM standards and FDA cleared.

GPS Surgical stainless steel instruments feature anatomical silicone handles, are designed for variation in surgical techniques and pathology to assure repeatable and safe surgical outcomes.

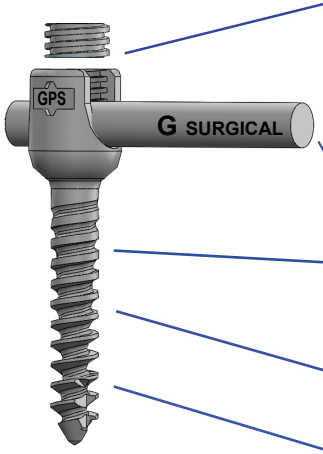
MONOAXIAL DESIGN

* Generous cancellous buttress threads and tapered core for maximum fixation.
* One piece titanium design for maximum strength.
* Simple fast Insertion where Variable Axis Screw is not required.
* Cutting Flutes 180° apart enhance self tapping.
* Spondylolisthesis reduction screws for correction and stabilization of difficult anatomical pathology features thick wall construction for greater traverse loading.
* Available in 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5 and 9 mm diameters, 25 - 55 mm lengths.

POLYAXIAL DESIGN

* Same design features as the monoaxial design with the following additional features.
* Accommodates anatomical positioning due to variable axis screw.
* Patented design knurl machining locks the screw axis into position.
* Color coded body for easy diameter identification.
* Available in 4, 4.5, 5, 5.5, 6, 6.5, 7, 7.5, 8, 8.5 and 9 mm diameters, 25 - 55 mm lengths.

MONOAXIAL



Easy starting, low profile trapezoidal thread minimizes cross threading and maximizes locking performance Slotted body and base of tulip both can be used to seat rods with provided instruments.

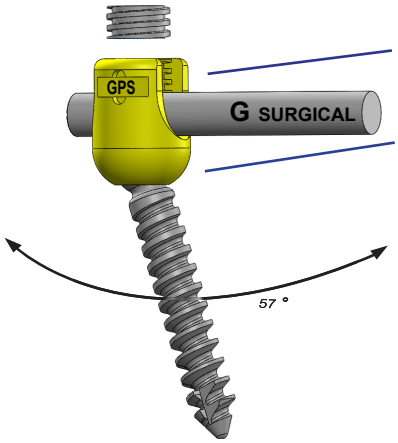
6 mm rod ensures maximum construct strength.

Cortical transistion engineered for optimal balance of pullout and mechanical strength.

Cancellous thread for maximum bone fixation.

2 self tapping cutting flutes 180° for easy insertion.

POLYAXIAL



Color coded body for easy diameter identification.

Patented spherical knurl head of screw locks angle of screw to body when set screw is attached.

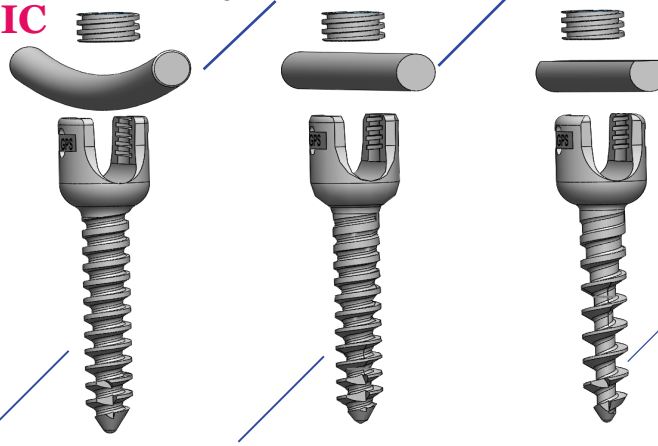
PATHOLOGY SPECIFIC

(Available in Monaxial and Polyaxial)

Precurved Rod
Reduces Surgical Time

Standard 6 mm Rod

Low Profile Rod
For increased surface contact



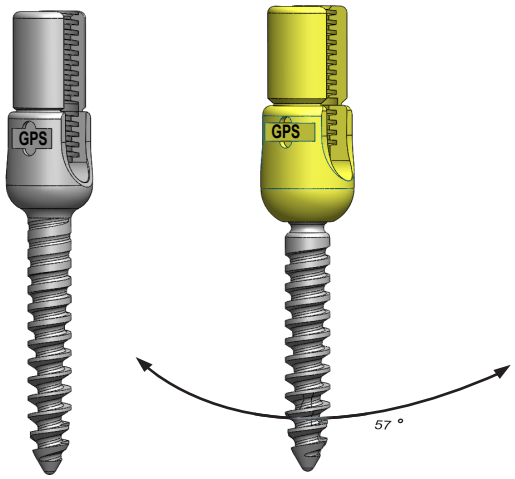
GPS DC (Deep Cut)
Cancellous thread increases purchase in osteoporotic bone·

GPS HD (Heavy Duty)
20% increase in cross sectional area

GPS Standard

REDUCTION

(Available in Monaxial and Polyaxial)



Heavy wall thickness allows aggressive side loading.

Snap off groove allows tool to cleanly break away top body when rod is seated and secured.

G SURGICAL CO.,LTD. PEDICLE SYSTEM

Rods

TR-1604	6 mm x 40 mm Titanium Rod
TR-1605	6 mm x 50 mm Titanium Rod
TR-1606	6 mm x 60 mm Titanium Rod
TR-1607	6 mm x 70 mm Titanium Rod
TR-1608	6 mm x 80 mm Titanium Rod
TR-1609	6 mm x 90 mm Titanium Rod
TR-1610	6 mm x 100 mm Titanium Rod
TR-1611	6 mm x 110 mm Titanium Rod
TR-1612	6 mm x 120 mm Titanium Rod
TR-1613	6 mm x 130 mm Titanium Rod
TR-1614	6 mm x 140 mm Titanium Rod
TR-1615	6 mm x 150 mm Titanium Rod
TR-1616	6 mm x 160 mm Titanium Rod
TR-1617	6 mm x 170 mm Titanium Rod
TR-1618	6 mm x 180 mm Titanium Rod
TR-1619	6 mm x 190 mm Titanium Rod
TR-1620	6 mm x 200 mm Titanium Rod
TR-1630	6 mm x 200 mm Titanium Rod
TR-1640	6 mm x 400 mm Titanium Rod
TRC-1604	6 mm x 40 mm Titanium Rod, Curved
TRC-1605	6 mm x 50 mm Titanium Rod, Curved
TRC-1606	6 mm x 60 mm Titanium Rod, Curved
TRC-1607	6 mm x 70 mm Titanium Rod, Curved
TRC-1608	6 mm x 80 mm Titanium Rod, Curved
TRC-1609	6 mm x 90 mm Titanium Rod, Curved
TRC-1610	6 mm x 100 mm Titanium Rod, Curved
TRC-1611	6 mm x 110 mm Titanium Rod, Curved
TRC-1612	6 mm x 120 mm Titanium Rod, Curved
TRF-1604	6 mm x 40 mm Titanium Rod, Flat
TRF-1605	6 mm x 50 mm Titanium Rod, Flat
TRF-1606	6 mm x 60 mm Titanium Rod, Flat
TRF-1607	6 mm x 70 mm Titanium Rod, Flat
TRF-1608	6 mm x 80 mm Titanium Rod, Flat
TRF-1609	6 mm x 90 mm Titanium Rod, Flat
TRF-1610	6 mm x 100 mm Titanium Rod, Flat
TRF-1611	6 mm x 110 mm Titanium Rod, Flat
TRF-1612	6 mm x 120 mm Titanium Rod, Flat
TRF-1613	6 mm x 130 mm Titanium Rod, Flat
TRF-1614	6 mm x 140 mm Titanium Rod, Flat
TRF-1615	6 mm x 150 mm Titanium Rod, Flat
TRFC-1605	6 mm x 50 mm Titanium Rod, Flat Curve
TRFC-1606	6 mm x 60 mm Titanium Rod, Flat Curve
TRFC-1607	6 mm x 70 mm Titanium Rod, Flat Curve
TRFC-1608	6 mm x 80 mm Titanium Rod, Flat Curve
TRFC-1609	6 mm x 90 mm Titanium Rod, Flat Curve
TR-1510	5 mm x 100 mm Titanium Rod
TRS-1640	6 mm x 100 mm Titanium Rod , Grade 2

Set Screw

PA-4000	Set Screw
PA-4000L	Set Screw, 7.5 mm - 8.5 mm
PA-4000S	Set Screw , Thoracic



Monoaxial Screw

MA-4018T	4 mm x 18 mm Monoaxial Screw, Thoracic
MA-4022T	4 mm x 22mm Monoaxial Screw, Thoracic
MA-4025	4 mm x 25 mm Monoaxial Screw
MA-4025T	4 mm x 25 mm Monoaxial Screw, Thoracic
MA-4030	4 mm x 30 mm Monoaxial Screw
MA-4030T	4 mm x 30mm Monoaxial Screw, Thoracic
MA-4035	4 mm x 35 mm Monoaxial Screw
MA-4040	4 mm x 40 mm Monoaxial Screw
MA-4045	4 mm x 45 mm Monoaxial Screw
MA-4050	4 mm x 50 mm Monoaxial Screw
MA-4055	4 mm x 55 mm Monoaxial Screw
MA-4525	4.5 mm x 25 mm Monoaxial Screw
MA-4530	4.5 mm x 30 mm Monoaxial Screw
MA-4535	4.5 mm x 35 mm Monoaxial Screw
MA-4540	4.5 mm x 40 mm Monoaxial Screw
MA-4545	4.5 mm x 45 mm Monoaxial Screw
MA-4550	4.5 mm x 50 mm Monoaxial Screw
MA-4555	4.5 mm x 55 mm Monoaxial Screw
MA-5025	5 mm x 25 mm Monoaxial Screw
MA-5030	5 mm x 30 mm Monoaxial Screw
MA-5035	5 mm x 35 mm Monoaxial Screw
MA-5040	5 mm x 40 mm Monoaxial Screw
MA-5045	5 mm x 45 mm Monoaxial Screw
MA-5050	5 mm x 50 mm Monoaxial Screw
MA-5055	5 mm x 55 mm Monoaxial Screw
MA-5525	5.5 mm x 25 mm Monoaxial Screw
MA-5530	5.5 mm x 30 mm Monoaxial Screw
MA-5535	5.5 mm x 35 mm Monoaxial Screw
MA-5540	5.5 mm x 40 mm Monoaxial Screw
MA-5545	5.5 mm x 45 mm Monoaxial Screw
MA-5550	5.5 mm x 50 mm Monoaxial Screw
MA-5555	5.5 mm x 55 mm Monoaxial Screw
MA-6025	6 mm x 25 mm Monoaxial Screw
MA-6030	6 mm x 30 mm Monoaxial Screw
MA-6035	6 mm x 35 mm Monoaxial Screw
MA-6040	6 mm x 40 mm Monoaxial Screw
MA-6045	6 mm x 45 mm Monoaxial Screw
MA-6050	6 mm x 50 mm Monoaxial Screw
MA-6055	6 mm x 55 mm Monoaxial Screw
MA-6525	6.5 mm x 25 mm Monoaxial Screw
MA-6530	6.5 mm x 30 mm Monoaxial Screw
MA-6535	6.5 mm x 35 mm Monoaxial Screw
MA-6540	6.5 mm x 40 mm Monoaxial Screw
MA-6545	6.5 mm x 45 mm Monoaxial Screw
MA-6550	6.5 mm x 50 mm Monoaxial Screw
MA-6555	6.5 mm x 55 mm Monoaxial Screw

G SURGICAL PEDICLE SYSTEM

Monoaxial Screw

MA-7025	7 mm x 25 mm Monoaxial Screw
MA-7030	7 mm x 30 mm Monoaxial Screw
MA-7035	7 mm x 35 mm Monoaxial Screw
MA-7040	7 mm x 40 mm Monoaxial Screw
MA-7045	7 mm x 45 mm Monoaxial Screw
MA-7050	7 mm x 50 mm Monoaxial Screw
MA-7055	7 mm x 55 mm Monoaxial Screw
MA-7525	7.5 mm x 25 mm Monoaxial Screw
MA-7530	7.5 mm x 30 mm Monoaxial Screw
MA-7535	7.5 mm x 35 mm Monoaxial Screw
MA-7540	7.5 mm x 40 mm Monoaxial Screw
MA-7545	7.5 mm x 45 mm Monoaxial Screw
MA-7550	7.5 mm x 50 mm Monoaxial Screw
MA-7555	7.5 mm x 55 mm Monoaxial Screw
MA-8025	8 mm x 25 mm Monoaxial Screw
MA-8030	8 mm x 30 mm Monoaxial Screw
MA-8035	8 mm x 35 mm Monoaxial Screw
MA-8040	8 mm x 40 mm Monoaxial Screw
MA-8045	8 mm x 45 mm Monoaxial Screw
MA-8050	8 mm x 50 mm Monoaxial Screw
MA-8055	8 mm x 55 mm Monoaxial Screw
MA-8525	8.5 mm x 25 mm Monoaxial Screw
MA-8530	8.5 mm x 30 mm Monoaxial Screw
MA-8535	8.5 mm x 35 mm Monoaxial Screw
MA-8540	8.5 mm x 40 mm Monoaxial Screw
MA-8545	8.5 mm x 45 mm Monoaxial Screw
MA-8550	8.5 mm x 50 mm Monoaxial Screw
MA-8555	8.5 mm x 55 mm Monoaxial Screw
MA-8580	8.5 mm x 80 mm Monoaxial Screw
MA-9040	9.0 mm x 40 mm Monoaxial Screw
MA-9045	9.0 mm x 45 mm Monoaxial Screw

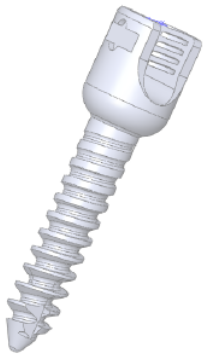
Crosslinks and Connector

CL-1000	Crosslink Assembly 3 mm Bar
CL-4050	Crosslink Assembly 40 mm-50 mm
CL-5060	Crossslink Assembly 50 mm-60 mm
CL-6070	Crosslink Assembly 60 mm-70 mm
CL-7080	Crosslink Assembly 70 mm-80 mm
CL-8090	Crosslink Assembly 80 mm-90 mm
LC-6025	Lateral Connector 25 mm
LC-6030	Lateral Connector 30 mm
LC-6035	Lateral Connector 35 mm
RC-5060	Lateral Connector 5 mm x 6 mm
RC-6060	Axial Connector 6 mm
RC-6080	Rod Connector 6 mm
RC-6090	Rod Connector Hook Style 6 mm
RC-6095	Axial Connector 6 mm
PA-3040	Crosslink Assembly 30 mm-40 mm
PA-4070	Crossslink Assembly 40 mm-70 mm
PA-4120	Crossslink Assembly 70 mm-120 mm

G SURGICAL CO.,LTD. PEDICLE SYSTEM

Monoaxial Reduction Screw

RMS-5025	5 mm x 25 mm Reduction Screw, Monoaxial
RMS-5030	5 mm x 30 mm Reduction Screw, Monoaxial
RMS-5035	5 mm x 35 mm Reduction Screw, Monoaxial
RMS-5040	5 mm x 40 mm Reduction Screw, Monoaxial
RMS-5045	5 mm x 45 mm Reduction Screw, Monoaxial
RMS-5050	5 mm x 50 mm Reduction Screw, Monoaxial
RMS-5055	5 mm x 55 mm Reduction Screw, Monoaxial
RMS-6025	6 mm x 25 mm Reduction Screw, Monoaxial
RMS-6030	6 mm x 30 mm Reduction Screw, Monoaxial
RMS-6035	6 mm x 35 mm Reduction Screw, Monoaxial
RMS-6040	6 mm x 40 mm Reduction Screw, Monoaxial
RMS-6045	6 mm x 45 mm Reduction Screw, Monoaxial
RMS-6050	6 mm x 50 mm Reduction Screw, Monoaxial
RMS-6055	6 mm x 55 mm Reduction Screw, Monoaxial
RMS-6525	6.5 mm x 25 mm Reduction Screw, Monoaxial
RMS-6530	6.5 mm x 30 mm Reduction Screw, Monoaxial
RMS-6535	6.5 mm x 35 mm Reduction Screw, Monoaxial
RMS-6540	6.5 mm x 40 mm Reduction Screw, Monoaxial
RMS-6545	6.5 mm x 45 mm Reduction Screw, Monoaxial
RMS-6550	6.5 mm x 50 mm Reduction Screw, Monoaxial
RMS-6555	6.5 mm x 55 mm Reduction Screw, Monoaxial
RMS-7025	7 mm x 25 mm Reduction Screw, Monoaxial
RMS-7030	7 mm x 30 mm Reduction Screw, Monoaxial
RMS-7035	7 mm x 35 mm Reduction Screw, Monoaxial
RMS-7040	7 mm x 40 mm Reduction Screw, Monoaxial
RMS-7045	7 mm x 45 mm Reduction Screw, Monoaxial
RMS-7050	7 mm x 50 mm Reduction Screw, Monoaxial
RMS-7055	7 mm x 55 mm Reduction Screw, Monoaxial
RMS-7525	7.5 mm x 25 mm Reduction Screw, Monoaxial
RMS-7530	7.5 mm x 30 mm Reduction Screw, Monoaxial
RMS-7535	7.5 mm x 35 mm Reduction Screw, Monoaxial
RMS-7540	7.5 mm x 40 mm Reduction Screw, Monoaxial
RMS-7545	7.5 mm x 45 mm Reduction Screw, Monoaxial
RMS-7550	7.5 mm x 50 mm Reduction Screw, Monoaxial
RMS-7555	7.5 mm x 55 mm Reduction Screw, Monoaxial



Monoaxial Deep Cut Screw

MA-6525DC	6.5 mm x 25 mm Monoaxial Screw, Deep Cut
MA-6530DC	6.5 mm x 30 mm Monoaxial Screw, Deep Cut
MA-6535DC	6.5 mm x 35 mm Monoaxial Screw, Deep Cut
MA-6540DC	6.5 mm x 40 mm Monoaxial Screw, Deep Cut
MA-6545DC	6.5 mm x 45 mm Monoaxial Screw, Deep Cut
MA-6550DC	6.5 mm x 50 mm Monoaxial Screw, Deep Cut
MA-6555DC	6. 5mm x 55 mm Monoaxial Screw, Deep Cut
MA-7025DC	7.0 mm x 25 mm Monoaxial Screw, Deep Cut
MA-7030DC	7.0 mm x 30 mm Monoaxial Screw, Deep Cut
MA-7035DC	7.0 mm x 35 mm Monoaxial Screw, Deep Cut
MA-7040DC	7.0 mm x 40 mm Monoaxial Screw, Deep Cut
MA-7045DC	7.0 mm x 45 mm Monoaxial Screw, Deep Cut
MA-7050DC	7.0 mm x 50 mm Monoaxial Screw, Deep Cut
MA-7055DC	7.0 mm x 55 mm Monoaxial Screw, Deep Cut
MA-7525DC	7.5 mm x 25 mm Monoaxial Screw, Deep Cut
MA-7530DC	7.5 mm x 30 mm Monoaxial Screw, Deep Cut
MA-7535DC	7.5 mm x 35 mm Monoaxial Screw, Deep Cut
MA-7540DC	7.5 mm x 40 mm Monoaxial Screw, Deep Cut
MA-7545DC	7.5 mm x 45 mm Monoaxial Screw, Deep Cut
MA-7550DC	7.5 mm x 50 mm Monoaxial Screw, Deep Cut
MA-7555DC	7.5 mm x 55 mm Monoaxial Screw, Deep Cut

Monoaxial Heavy Duty Screw

MA-6525HD	6.5 mm x 25 mm Monoaxial Screw, Heavy Duty
MA-6530HD	6.5 mm x 30 mm Monoaxial Screw, Heavy Duty
MA-6535HD	6.5 mm x 35 mm Monoaxial Screw, Heavy Duty
MA-6540HD	6.5 mm x 40 mm Monoaxial Screw, Heavy Duty
MA-6545HD	6.5 mm x 45 mm Monoaxial Screw, Heavy Duty
MA-6550HD	6.5 mm x 50 mm Monoaxial Screw, Heavy Duty
MA-6555HD	6.5 mm x 55 mm Monoaxial Screw, Heavy Duty
MA-7025HD	7 mm x 25 mm Monoaxial Screw, Heavy Duty
MA-7030HD	7 mm x 30 mm Monoaxial Screw, Heavy Duty
MA-7035HD	7 mm x 35 mm Monoaxial Screw, Heavy Duty
MA-7040HD	7 mm x 40 mm Monoaxial Screw, Heavy Duty
MA-7045HD	7 mm x 45 mm Monoaxial Screw, Heavy Duty
MA-7050HD	7 mm x 50 mm Monoaxial Screw, Heavy Duty
MA-7055HD	7 mm x 55 mm Monoaxial Screw, Heavy Duty
MA-7525HD	7.5 mm x 25 mm Monoaxial Screw, Heavy Duty
MA-7530HD	7.5 mm x 30 mm Monoaxial Screw, Heavy Duty
MA-7535HD	7.5 mm x 35 mm Monoaxial Screw, Heavy Duty
MA-7540HD	7.5 mm x 40 mm Monoaxial Screw, Heavy Duty
MA-7545HD	7.5 mm x 45 mm Monoaxial Screw, Heavy Duty
MA-7550HD	7.5 mm x 50 mm Monoaxial Screw, Heavy Duty
MA-7555HD	7.5 mm x 55 mm Monoaxial Screw, Heavy Duty

G SURGICAL PEDICLE SYSTEM

Hook System

PH-0804	Pedicle Hook, 8 mm blade width x 4 mm throat
PH-0805	Pedicle Hook, 8 mm blade width x 5 mm throat
PH-0807	Pedicle Hook, 8 mm blade width x 7 mm throat
PH-0809	Pedicle Hook, 8 mm blade width x 9 mm throat
LH-0504	Lamina Hook, 5 mm blade width x 4 mm throat
LH-0505	Lamina Hook, 5 mm blade width x 5 mm throat
LH-0507	Lamina Hook, 5 mm blade width x 7 mm throat
LH-0509	Lamina Hook, 5 mm blade width x 9 mm throat
LH-0706	Lamina Hook, 7 mm blade width x 6 mm throat
LH-0707	Lamina Hook, 7 mm blade width x 7 mm throat
LH-0709	Lamina Hook, 7 mm blade width x 9 mm throat
LH-0711	Lamina Hook, 7 mm blade width x 11 mm throat
AH-0507L	Angled Hook, 5 mm blade width x 7 mm throat, 20° left
AH-0507R	Angled Hook, 5 mm blade width x 7 mm throat, 20° right
AH-0509L	Angled Hook, 5 mm blade width x 9 mm throat, 20° left
AH-0509R	Angled Hook, 5 mm blade width x 9 mm throat, 20° right
OH-0709L	Offset Hook 7 mm blade x 9 mm throat, left
OH-0709R	Offset Hook, 7 mm blade x 9 mm throat, right
OH-0711L	Offset Hook, 7 mm blade x 11 mm throat, left
OH-0711R	Offset Hook, 7 mm blade x 11 mm throat, right
SH-0010	Lateral Connector, Open
SH-0020	Lateral Connector, Closed
SH-0030	Axial Connector
SH-0040	Domino Connector, Small
SH-0050	Domino Connector, Large
SH-0060	Set Screw for Connector

Polyaxial Heavy Duty Screw

PA-6525HD	6.5 mm x 25 mm Polyaxial Screw, Heavy Duty
PA-6530HD	6.5 mm x 30 mm Polyaxial Screw, Heavy Duty
PA-6535HD	6.5 mm x 35 mm Polyaxial Screw, Heavy Duty
PA-6540HD	6.5 mm x 40 mm Polyaxial Screw, Heavy Duty
PA-6545HD	6.5 mm x 45 mm Polyaxial Screw, Heavy Duty
PA-6550HD	6.5 mm x 50 mm Polyaxial Screw, Heavy Duty
PA-6555HD	6.5 mm x 55 mm Polyaxial Screw, Heavy Duty
PA-7025HD	7 mm x 25 mm Polyaxial Screw, Heavy Duty
PA-7030HD	7 mm x 30 mm Polyaxial Screw, Heavy Duty
PA-7035HD	7 mm x 35 mm Polyaxial Screw, Heavy Duty
PA-7040HD	7 mm x 40 mm Polyaxial Screw, Heavy Duty
PA-7045HD	7 mm x 45 mm Polyaxial Screw, Heavy Duty
PA-7050HD	7 mm x 50 mm Polyaxial Screw, Heavy Duty
PA-7055HD	7 mm x 55 mm Polyaxial Screw, Heavy Duty
PA-7525HD	7.5 mm x 25 mm Polyaxial Screw, Heavy Duty
PA-7530HD	7.5 mm x 30 mm Polyaxial Screw, Heavy Duty
PA-7535HD	7.5 mm x 35 mm Polyaxial Screw, Heavy Duty
PA-7540HD	7.5 mm x 40 mm Polyaxial Screw, Heavy Duty
PA-7545HD	7.5 mm x 45 mm Polyaxial Screw, Heavy Duty
PA-7550HD	7.5 mm x 50 mm Polyaxial Screw, Heavy Duty
PA-7555HD	7.5 mm x 55 mm Polyaxial Screw, Heavy Duty

Polyaxial Screw

PA-4025	4 mm x 25 mm Polyaxial Screw
PA-4030	4 mm x 30 mm Polyaxial Screw
PA-4035	4 mm x 35 mm Polyaxial Screw
PA-4040	4 mm x 40 mm Polyaxial Screw
PA-4045	4 mm x 45 mm Polyaxial Screw
PA-4050	4 mm x 50 mm Polyaxial Screw
PA-4055	4 mm x 55 mm Polyaxial Screw
PA-4525	4.5 mm x 25 mm Polyaxial Screw
PA-4530	4.5 mm x 30 mm Polyaxial Screw
PA-4535	4.5 mm x 35 mm Polyaxial Screw
PA-4540	4.5 mm x 40 mm Polyaxial Screw
PA-4545	4.5 mm x 45 mm Polyaxial Screw
PA-4550	4.5 mm x 50 mm Polyaxial Screw
PA-4555	4.5 mm x 55 mm Polyaxial Screw
PA-5025	5 mm x 25 mm Polyaxial Screw
PA-5030	5 mm x 30 mm Polyaxial Screw
PA-5035	5 mm x 35 mm Polyaxial Screw
PA-5040	5 mm x 40 mm Polyaxial Screw
PA-5045	5 mm x 45 mm Polyaxial Screw
PA-5050	5 mm x 50 mm Polyaxial Screw
PA-5055	5 mm x 55 mm Polyaxial Screw
PA-5525	5.5 mm x 25 mm Polyaxial Screw
PA-5530	5.5 mm x 30 mm Polyaxial Screw
PA-5535	5.5 mm x 35 mm Polyaxial Screw
PA-5540	5.5 mm x 40 mm Polyaxial Screw
PA-5545	5.5 mm x 45 mm Polyaxial Screw
PA-5550	5.5 mm x 50 mm Polyaxial Screw
PA-5555	5.5 mm x 55 mm Polyaxial Screw
PA-6025	6 mm x 25 mm Polyaxial Screw
PA-6030	6 mm x 30 mm Polyaxial Screw
PA-6035	6 mm x 35 mm Polyaxial Screw
PA-6040	6 mm x 40 mm Polyaxial Screw
PA-6045	6 mm x 45 mm Polyaxial Screw
PA-6050	6 mm x 50 mm Polyaxial Screw
PA-6055	6 mm x 55 mm Polyaxial Screw
PA-6525	6.5 mm x 25 mm Polyaxial Screw
PA-6530	6.5 mm x 30 mm Polyaxial Screw
PA-6535	6.5 mm x 35 mm Polyaxial Screw
PA-6540	6.5 mm x 40 mm Polyaxial Screw
PA-6545	6.5 mm x 45 mm Polyaxial Screw
PA-6550	6.5 mm x 50 mm Polyaxial Screw
PA-6555	6.5 mm x 55 mm Polyaxial Screw
PA-7025	7 mm x 25 mm Polyaxial Screw
PA-7030	7 mm x 30 mm Polyaxial Screw
PA-7035	7 mm x 35 mm Polyaxial Screw
PA-7040	7 mm x 40 mm Polyaxial Screw
PA-7045	7 mm x 45 mm Polyaxial Screw
PA-7050	7 mm x 50 mm Polyaxial Screw
PA-7055	7 mm x 55 mm Polyaxial Screw

Polyaxial Reduction Screw

RS-5025	5 mm x 25 mm Reduction Screw, Polyaxial
RS-5030	5 mm x 30 mm Reduction Screw, Polyaxial
RS-5035	5 mm x 35 mm Reduction Screw, Polyaxial
RS-5040	5 mm x 40 mm Reduction Screw, Polyaxial
RS-5045	5 mm x 45 mm Reduction Screw, Polyaxial
RS-5050	5 mm x 50 mm Reduction Screw, Polyaxial
RS-5055	5 mm x 55 mm Reduction Screw, Polyaxial
RS-6025	6 mm x 25 mm Reduction Screw, Polyaxial
RS-6030	6 mm x 30 mm Reduction Screw, Polyaxial
RS-6030	6 mm x 35 mm Reduction Screw, Polyaxial
RS-6040	6 mm x 40 mm Reduction Screw, Polyaxial
RS-6045	6 mm x 45 mm Reduction Screw, Polyaxial
RS-6050	6 mm x 50 mm Reduction Screw, Polyaxial
RS-6055	6 mm x 55 mm Reduction Screw, Polyaxial
RS-6525	6.5 mm x 25 mm Reduction Screw, Polyaxial
RS-6530	6.5 mm x 30 mm Reduction Screw, Polyaxial
RS-6535	6.5 mm x 35 mm Reduction Screw, Polyaxial
RS-6040	6.5 mm x 40 mm Reduction Screw, Polyaxial
RS-6545	6.5 mm x 45 mm Reduction Screw, Polyaxial
RS-6550	6.5 mm x 50 mm Reduction Screw, Polyaxial
RS-6555	6.5 mm x 55 mm Reduction Screw, Polyaxial
RS-7025	7 mm x 25 mm Reduction Screw, Polyaxial
RS-7030	7 mm x 30 mm Reduction Screw, Polyaxial
RS-7035	7 mm x 35 mm Reduction Screw, Polyaxial
RS-7040	7 mm x 40 mm Reduction Screw, Polyaxial
RS-7045	7 mm x 45 mm Reduction Screw, Polyaxial
RS-7050	7 mm x 50 mm Reduction Screw, Polyaxial
RS-7055	7 mm x 55 mm Reduction Screw, Polyaxial

Polyaxial Screw

PA-7525	7.5 mm x 25 mm Polyaxial Screw
PA-7530	7.5 mm x 30 mm Polyaxial Screw
PA-7535	7.5 mm x 35 mm Polyaxial Screw
PA-7540	7.5 mm x 40 mm Polyaxial Screw
PA-7545	7.5 mm x 45 mm Polyaxial Screw
PA-7550	7.5 mm x 50 mm Polyaxial Screw
PA-7555	7.5 mm x 55 mm Polyaxial Screw
PA-8025	8 mm x 25 mm Polyaxial Screw
PA-8030	8 mm x 30 mm Polyaxial Screw
PA-8035	8 mm x 35 mm Polyaxial Screw
PA-8040	8 mm x 40 mm Polyaxial Screw
PA-8045	8 mm x 45 mm Polyaxial Screw
PA-8050	8 mm x 50 mm Polyaxial Screw
PA-8055	8 mm x 55 mm Polyaxial Screw
PA-8525	8.5 mm x 25 mm Polyaxial Screw
PA-8530	8.5 mm x 30 mm Polyaxial Screw
PA-8535	8.5 mm x 35 mm Polyaxial Screw
PA-8540	8.5 mm x 40 mm Polyaxial Screw
PA-8545	8.5 mm x 45 mm Polyaxial Screw
PA-8550	8.5 mm x 50 mm Polyaxial Screw
PA-8555	8.5 mm x 55 mm Polyaxial Screw
PA-8580	8.5 mm x 80 mm Polyaxial Screw

Polyaxial Deep Cut Screw

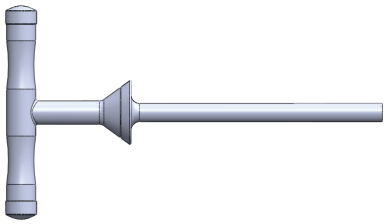
PA-6525DC	6.5 mm x 25 mm Polyaxial Screw, Deep Cut
PA-6530DC	6.5 mm x 30 mm Polyaxial Screw, Deep Cut
PA-6535DC	6.5 mm x 35 mm Polyaxial Screw, Deep Cut
PA-6540DC	6.5 mm x 40 mm Polyaxial Screw, Deep Cut
PA-6545DC	6.5 mm x 45 mm Polyaxial Screw, Deep Cut
PA-6550DC	6.5 mm x 50 mm Polyaxial Screw, Deep Cut
PA-6555DC	6.5mm x 55 mm Polyaxial Screw, Deep Cut
PA-7025DC	7.0 mm x 25 mm Polyaxial Screw, Deep Cut
PA-7030DC	7.0 mm x 30 mm Polyaxial Screw, Deep Cut
PA-7035DC	7.0 mm x 35 mm Polyaxial Screw, Deep Cut
PA-7040DC	7.0 mm x 40 mm Polyaxial Screw, Deep Cut
PA-7045DC	7.0 mm x 45 mm Polyaxial Screw, Deep Cut
PA-7050DC	7.0 mm x 50 mm Polyaxial Screw, Deep Cut
PA-7055DC	7.0 mm x 55 mm Polyaxial Screw, Deep Cut
PA-7525DC	7.5 mm x 25 mm Polyaxial Screw, Deep Cut
PA-7530DC	7.5 mm x 30 mm Polyaxial Screw, Deep Cut
PA-7535DC	7.5 mm x 35 mm Polyaxial Screw, Deep Cut
PA-7540DC	7.5 mm x 40 mm Polyaxial Screw, Deep Cut
PA-7545DC	7.5 mm x 45 mm Polyaxial Screw, Deep Cut
PA-7550DC	7.5 mm x 50 mm Polyaxial Screw, Deep Cut
PA-7555DC	7.5 mm x 55 mm Polyaxial Screw, Deep Cut

Polyaxial Reduction Screw 5.5 System

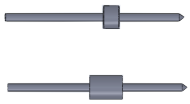
RS-4525-55	4.5 mm x 25 mm Reduction Screw, Polyaxial
RS-4530-55	4.5 mm x 30 mm Reduction Screw, Polyaxial
RS-4535-55	4.5 mm x 35 mm Reduction Screw, Polyaxial
RS-4545-55	4.5 mm x 45 mm Reduction Screw, Polyaxial
RS-4550-55	4.5 mm x 50 mm Reduction Screw, Polyaxial
RS-4550-55	4.5 mm x 50 mm Reduction Screw, Polyaxial
RS-4555-55	4.5 mm x 55 mm Reduction Screw, Polyaxial
RS-5525-55	5.5 mm x 25 mm Reduction Screw, Polyaxial
RS-5530-55	5.5 mm x 30 mm Reduction Screw, Polyaxial
RS-5535-55	5.5 mm x 35 mm Reduction Screw, Polyaxial
RS-5540-55	5.5 mm x 40 mm Reduction Screw, Polyaxial
RS-5545-55	5.5 mm x 45 mm Reduction Screw, Polyaxial
RS-5550-55	5.5 mm x 50 mm Reduction Screw, Polyaxial
RS-5555-55	5.5 mm x 55 mm Reduction Screw, Polyaxial
RS-6525-55	6.5 mm x 25 mm Reduction Screw Polyaxial
RS-6530-55	6.5 mm x 30 mm Reduction Screw Polyaxial
RS-6535-55	6.5 mm x 35 mm Reduction Screw Polyaxial
RS-6540-55	6.5 mm x 40 mm Reduction Screw Polyaxial
RS-6545-55	6.5 mm x 45 mm Reduction Screw Polyaxial
RS-6550-55	6.5 mm x 50 mm Reduction Screw Polyaxial
RS-6555-55	6.5 mm x 55 mm Reduction Screw Polyaxial

G SURGICAL PEDICLE SYSTEM

G Surgical Pedicle Screw System GPS Instruments provided in a 3 level autoclaveable case. All instruments are manufactured from surgical grade stainless steel, with laser engraved markings for easy identification and have silkscreened graphics for placement of instruments in the autoclavable case. Anatomical silicone handles are provided for ease of use.



SSG0021 Cross Link Torque measuring Device



PA-5002 Guide Pin 5 mm
PA-5002L Guide Pin 6 mm



SSP0008M Poly Screw Driver



SSG0004 Guide Pin Driver



SSG0005C Probe, Curved



SSG0005S Probe, Straight



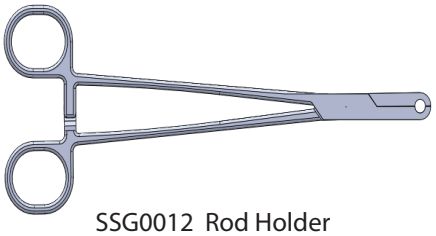
SSG0001 Awl



SSG0020M Torque Measuring Device 4 mm



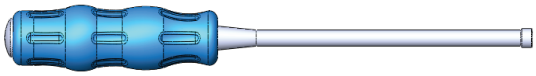
SSP0008S Screw Driver Outer Shaft



SSG0012 Rod Holder



SSP0214 Rod Pusher



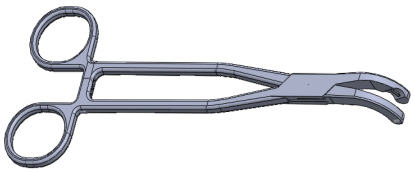
CLH0012 Cross Link Nut Driver 7 mm



SSG0006 Tester



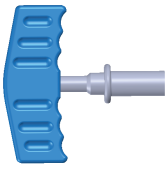
SSG0008 Depth Gauge



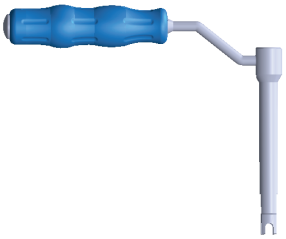
SSP0009 Housing Holder



SSP0024 4 mm Hex Driver



SSP0118 Quick Connect T-Handle



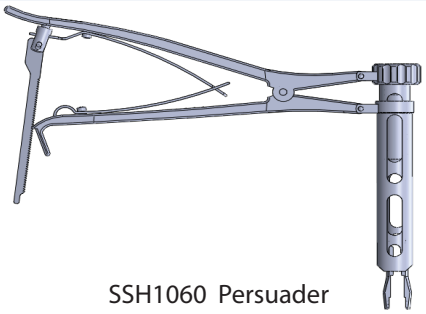
SSP0001M Power Holder



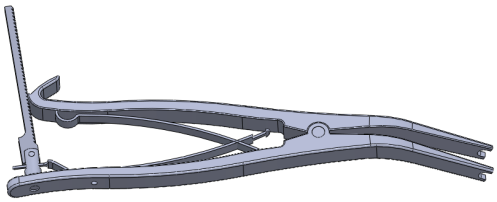
SSP0024M Wedge Tip Screw Driver



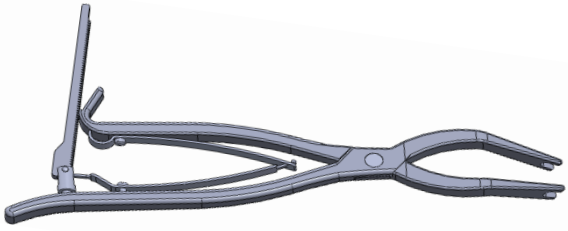
SSP0010M Rod Fork For Slot



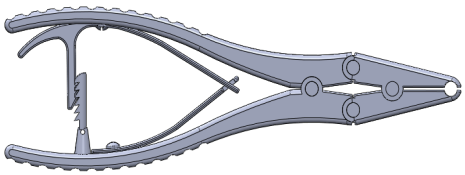
SSH1060 Persuader



SSP0015 Spreader



SSP0016 Compressor



SSG0019 Derotator



SSP0012M Mono Screw Driver Shaft



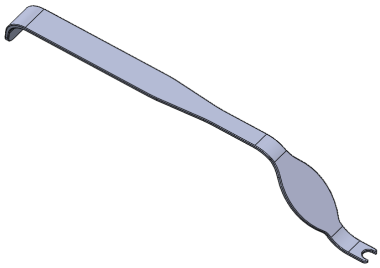
SSP0005M Mono Screw Adjust



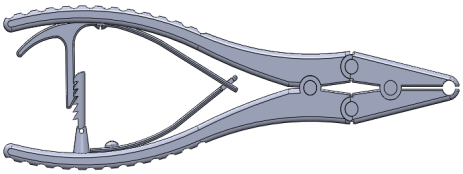
SSP0005 Poly Screw Adjust 2.5 mm



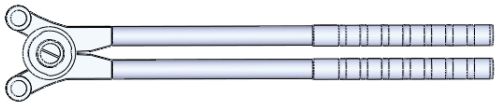
SSP00004L Poly Screw Driver Shaft 7.5 mm - 8.5 mm



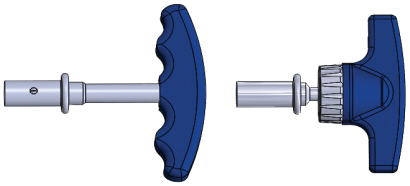
RET0001 Retractor Soft Tissue, Cobra



SSG0019 Derotator



SSG0011 Rod Bender



SSP0022 Quick Connect Pear Shape Handle, Ratcheting
SSP0028 Quick Connect T-Handle, Ratcheting



SSP0018-50 Tap 5.0 mm
SSP0018-60 Tap 6.0 mm
SSP0018-70 Tap 7.0 mm



SSG0025 Cross Link Nut Driver



PA-5000 Sterilization Case, Implant
PA-5001 Sterilization Case, Instruments

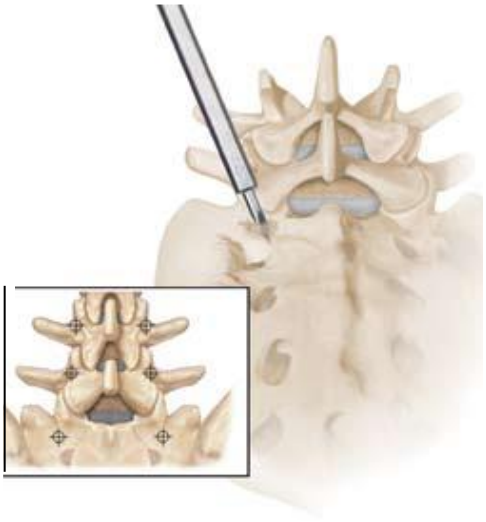
Polyaxial and Monoaxial Surgical Technique



Screw insertion should follow the angle of the pedicle canal

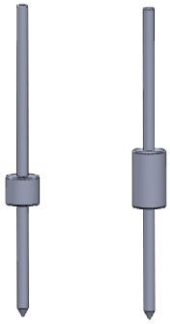
Surgical Approach and Preparation

The patient is positioned prone as is customary for the surgeon. The spine is subperiostally exposed through a midline or paramedian incision and a decompression if indicated, is performed. Decortication must be done completely.



Pedicle Preparation

Determine the pedicle canal entry site. Prepare the pedicle canal using a burr and or the trocar tipped awl SSG0001 provided in the instrument set.



Use small and large Guide Pins to indicate left- or right-side placement

Insert the Straight Bone Probe SSG0005S (straight) or SSG0005C (Curve) into the established entry site, gently pressing through the pedicle canal to desired hole depth. Laser marking in 10mm increments on the probe can be referenced for depth penetration of the canal.



Guide Pins may be placed to identify appropriate screw trajectory via lateral x-ray/fluoroscopy. Small and large Guide Pins are provided for easy identification when using fluoro. Use Guide Pin Inserter SSG0004 for placement of the guide pins.



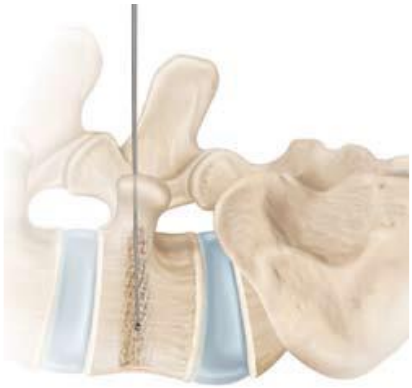


Straight Tester can be inserted to help determine continuity of cortical bone

Insert the Tester SSG0006 and palpate the hole's inner surface to verify cortical bone surrounding the pedicle canal.

Use the Depth Gauge SSG0008 to verify appropriate screw length to be used.

The Depth Gauge millimeter markings are in 5 mm increments for accurate depth identification. and match screw length increments.







Polyaxial Screw Insertion

Remove any bony structures will obstruct movement of the polyaxial screw body. Polyaxial screws are inserted using a Poly Screw Driver. Several driver styles are available ether utilizing a ball detent driver hex or a threaded distal shaft, dependent on the surgeon's preference and technique. All are used in conjunction with the silicone handle Outer shaft, SSP0008S and Quick Connect T Handle SSP0002 for screw sizes, 4 mm - 7 mm. Use the poly Screw Driver SSP0004L and SSP0008L for polyaxial screw 7.5 mm and 8 mm along with the Quick Connect T Handle SSP0002.

Polyaxial Screw Dimensions

Diameter	*Length*
4.0 mm	*25-55 mm*
4.5 mm	*25-55 mm*
5.0 mm	*25-55 mm*
5.5 mm	*25-55 mm*
6.0 mm	*25-55 mm*
6.5 mm	*25-55 mm*
7.0 mm	*25-55 mm*
7.5 mm	*25-55 mm*
8.0 mm	*25-55 mm*
8.5 mm	*25-55 mm*

Polyaxial Reduction Screw

Diameter	*Length*
5.0 mm	*25-55 mm*
6.0 mm	*25-55 mm*
6.5 mm	*25-55 mm*
7.0 mm	*25-55 mm*

The outer shaft can be used to assist in applying additional torque to the polyaxial screw and if necessary allows easy removal of the polyaxial screw. One the polyaxial screw is assembled onto the driver, slide the outer shaft so that the tangs engage the screw slots and locks in place.



Insert the polyaxial screw into the desired pedicle and advance to a depth where full angulation of the polyaxial head is maintained. All screws are self-tapping. Taps are available and may be used to prepare the pedicle hole as an option.

<u>Note</u>: Do not advance the polyaxial screw to the point that angulation of the polybody is compromised.

To remove the Poly Screw Driver, turn counterclockwise while engaging the screw body with the tangs on the T-Handle Screw Guide.

Repeat the process until all screws are placed.







Monoaxial Screw Dimension

Diameter	Length
4.0 mm	25-55 mm
4.5 mm	25-55 mm
5.0 mm	25-55 mm
5.5 mm	25-55 mm
6.0 mm	25-55 mm
6.5 mm	25-55 mm
7.0 mm	25-55 mm
7.5 mm	25-55 mm
8.0 mm	25-55 mm
8.5 mm	25-55 mm



Monoaxial Reduction Dimension

Diameter	Length
5.0 mm	25-55 mm
6.0 mm	25-55 mm
6.5 mm	25-55 mm
7.0 mm	25-55 mm
7.5 mm	25-55 mm

6.0 mm diameter rods are available in the following lengths: 40 mm - 200 mm in 10 mm increments and 300, 400 mm

Mono Screw Insertion

Select the desired Monoaxial screw diameter and appropriate length. Monoaxial Screws are inserted using the Mono Screw Driver Shaft SSP0012M and Outer Shaft SSP0008S attached to the Quick Connect T-Handle SSP0002.

Insert the mono screw into the desired pedicle until the bottom of the mono screw body contacts the bone surrounding the screw insertion site.

Repeat the process until all screws are placed.

Rod Selection

Once screws have been placed, the appropriate rod length is determined. The rod should extend approximately 2-5 mm beyond the distal edge of the superior screw body and the most proximal edge of the inferior screw body. Both Table Top and Hand Held Rod Cutters and available for custom rod lengths.

The Rod Holder SSG0012 may be used to position the rod into each screw body.

The Housing Holder SSP0009 can be used to orientate the poly body for rod placement.

Provisionally place the rod into each screw and determine the amount of contouring required to achieve the desired sagittal profile.

Contour the rods as needed using the Rod Bender SSG0011. A properly contoured rod should fit into the

The bend radius is variable. By pulling out and
rotating the central button of the Rod Bender, a
small, medium, or large radius may be selected.

In-Situ Rod Benders Left & Right SSP0013L, SSP0013R may be used to contour the rod.

Pre-Curved rods are available in 40 - 100 mm lengths as an option.

Flat Rods and Pre Curved Flat Rods are available in 40- 120 mm and 40-90 mm respectively.

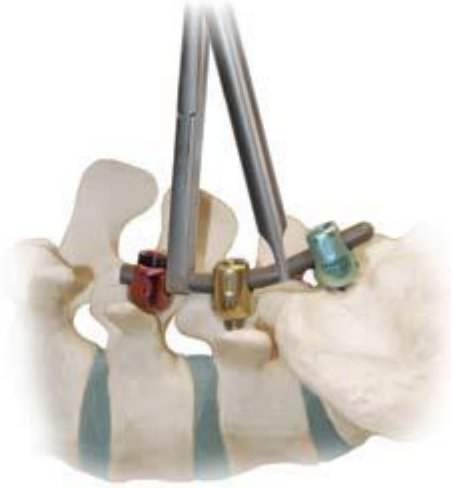




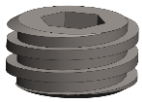
Rod Placement

When screw insertion and rod bending are complete, place the rod in the screw bodies using the Rod Holder. The Rod Fork SSP0010 and/or the Rod Pusher SSP0011 may be used to seat the rod while inserting the set screws.

If additional leverage is required, use the Persuader SSH1060 to assist in seating the rod. The set screw can be inserted through the cannulation of the Persuader once the rod is seated in the screw body.







4.0 mm - 7.0 mm polyaxial screws, all reduction crews and all mono screws utilize the small set screw

7.5 mm and 8.0 mm polyaxial screws utilize the large set screw

Set Screw Insertion

Insert the set screw with hex side up onto the Wedge Tip Screw Driver SSP0024M. Carefully align the Set Screw onto the top of the screw body.

Note: To reduce the possibility of cross-threading, turn the Wedge Tip Screw Driver counterclockwise until you feel a "click."

Turn the driver clockwise to start the set screw.

The set screw starts easily when properly aligned. If incorrectly aligned, the set screw will exhibit noticeable resistance during the initial threading.

Repeat the process until all set screws are inserted.



Rod Derotation

When the set screws have been inserted, the Derotator SSG0019 may be used to rotate the contoured rod into lordosis. While the rod is held in place with the Derotator, the set screw in the superior position is tightened using the Torque Measuring Device SSG0020 (106 in-lb). The remaining set screws are left loose to allow for compression and distraction.

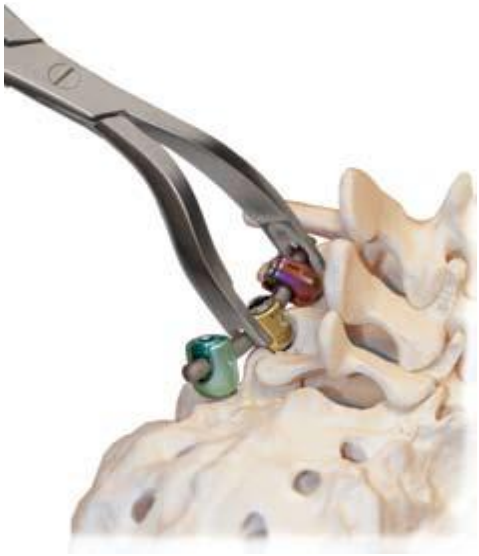


Compression/Distraction

Provisionally tighten the set screw on one side of the segment being translated while leaving the set screw on the contra-lateral side loose.

Perform compression using the Compressor SSP0016 or distraction using the Spreader SSP0015 against the provisionally tightened assembly.

After achieving the desired amount of correction, perform final tightening of the set screw.





Final Set Screw Tightening

Use the Wedge Tip Screw Driver SSP0024M to rundown each the set screws before final torque.

Position the Power Holder SSP0001M over the body of the screw and engage the rod into the slots in the Power Holder.

Insert the 4 mm Torque Measuring Device SSG0020 through the cannulated Power Holder and into the set screw.

Tighten the set screw until the line and arrow on the Torque Wrench Handle align (106 in-lbs.). while applying counter torque with the Power Holder.

<u>Note</u>: The 4 mm Torque measuring Device along with the Power Holder are the only instruments acceptable for final set screw tightening.



Repeat the process until the remaining set screws are tightened.

If necessary the set screw can be removed using the 4 mm Quick Connect Driver SSP0024 or Wedge Tip Screw Driver.

Do not use the 4 mm Torque Measuring Device for removal of the set screw.



Initial torque position



Final torque position (106 in-lbs.)

Transverse Link Placement



Cross Link Torque Measuring Device for transverse link SSG0021

Transverse links may be used to connect rod segments using Short Crosslink 30mm - 70mm or Long Crosslink 70 mm - 120 mm

Loosen the adjustable transverse link central lock nut enough to allow free movement of the link.





Provisional torque position (26 in-ibs)

Assemble the Cross Link Nut Driver SSG0025 hex driver into the outer sleeve and snap the outer sleeve over the lock nut while aligning slots in the sleeve with the cross link rod. Hand tighten and repeat for all 3 lock nuts.

Using the Cross Link Torque Measuring Device SSG0021, tighten the lock nut (26 in-lbs) to the middle line on the Torque Measuring Device and repeat for the remaining lock nuts.





Final torque position (70 in-ibs)

Finally tighten the outer lock nuts to 70 in-lbs. (Second line on Cross Link Torque Measuring Device = 70 in-lbs).

Finally tighten center lock nut to 70 in-lbs. (Second line on Cross Link Torque Measuring Device = 70 in-lbs).

